

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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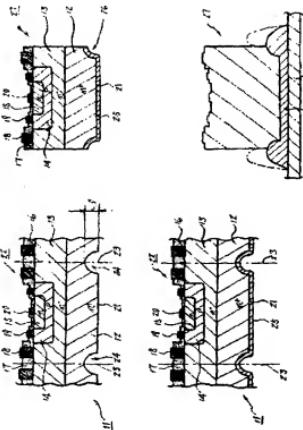
APPLICATION DATE : 30-04-81  
APPLICATION NUMBER : 56067219

APPLICANT : NEC HOME ELECTRONICS LTD;

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INT.CL. : H01L 21/58 H01L 29/72

TITLE : SEMICONDUCTOR DEVICE



ABSTRACT : PURPOSE: To improve the strength of soldering and reliability by forming notched sections to a fixing substrate for a semiconductor element and the fringe section of a base body at the soldering side and coating the whole surface containing the notched sections with a metallic layer.

CONSTITUTION: Dividing scribing prearranged lines 23 are set to the back of a wafer 11, grooves 24 are formed centering around the lines, and the metallic layer 25 of Au, etc. having excellent soldering adhesive property is evaporated onto the whole surface of a main surface 21 under vacuum. The wafer is broken along the scribing prearranged lines 23, and separate power transistor element 27 with the notched sections 26 at the fringe sections of the base bodies 12 and the metallic layers 25 shaped to the whole surfaces of the main surfaces 21 can be formed, and the elements are reciprocated and slid in the horizontal direction, and melted solder 7 is pushed up. Accordingly, the performance of soldering can be improved because the padding of the melted solder 7 can properly be controlled.

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